2011 CROP WEATHER REVIEW

January - March

The year began with approximately half the State having a drought rating of abnormally dry or drier according to the U.S. Drought Monitor. These drought areas were restricted to the leeward areas of Maui and Hawaii Counties. Throughout the first quarter, weather conditions were mostly mild with light trade winds and clear skies, excepting two heavy precipitation events. The first rainfall episode occurred mid-January and primarily affected the counties of Kauai, Honolulu, and Maui. These heavy rains initiated flooding and mudslides causing significant damage in some areas; however, the effects to overall agricultural production were minimal. During the month of February. weather conditions remained mostly fair, receiving amounts rainfall minimal of The second major statewide. precipitation event of the quarter occurred towards the end of the first week in March, and primarily affected Kauai and Honolulu Counties. Two consecutive days of record breaking daily maximum rainfall occurred at Lihue on Kauai with 2.80 and 2.70 inches falling March 3rd and respectively. The remainder of the month of March was marked by breezy trade winds bringing light passing precipitation to northerly, leeward, and central areas across the State.

April - June

Overall conditions throughout the second quarter of 2011 were dominated by typical island trade wind weather. Most areas experienced intermittent cloud

Drought Conditions Prevail

cover with light passing showers, which were slightly more intense in windward areas. Kona winds prevailed over trade winds for a few days in mid-April and brought increasing temperatures and vog across many areas through the State. An unusual storm system typically associated with winter weather hit the islands in early This storm resulted in June. localized heavy showers and thunderstorms, which hit the islands of Kauai and Oahu particularly hard, and produced snowfall at the summit of Mauna Kea on the Big Island. Drought conditions only fluctuated slightly throughout the quarter, approximately 60 percent of the remaining State rated abnormally dry or drier.

July - September

Weather conditions remained fairly consistent throughout the third quarter of 2011. Mostly sunny conditions prevailed with typical trade winds bringing showers to many areas, particularly in the evenings. Not enough precipitation was received to mitigate increasing drought conditions. Rain showers occurred most frequently on windward areas and mountain slopes, while leeward areas only received isolated very light rainfall. U.S. Drought Monitor rated 55 percent of the State, confined to regions of Hawaii and Maui Counties, in abnormally dry or drier conditions throughout the month of As August began, this July. drought rating increased 75 percent of the State but was still confined to areas in Hawaii and Maui Counties. During September, the drought rating for abnormally dry or drier conditions was increased to 95 percent of the State and included areas in all four of Hawaii's counties. Towards the end of September, some windward areas of Hawaii County received weekly rainfall totals of greater than 5 inches.

October – December

Weather for the final quarter of 2011 varied, with dry conditions persisting through October and heavy rainfall occurring during the November months of and December. Drought conditions continued to intensify through October while only light isolated showers fell primarily on windward areas, and sunny skies prevailed. The beginning of November brought heavy rains across the State. The rain continued to fall through November and by the end of the month, abnormally dry or drier drought conditions had fallen to 76 percent of the State. Rains were light and scattered in the beginning of December 2011, and continued to intensify throughout Windward areas in the month. particular received a great deal of precipitation and the soil was saturated in many of these areas. Leeward areas received less rainfall than the windward areas, but it was still enough to bring abnormally dry or drier drought conditions down to 56 percent of the State by the end of the month. Flash flood warnings had been issued for the counties of Hawaii, Maui, and Honolulu at various times throughout December.

Source: National Weather Service, National Drought Mitigation Center, and Farm Service Agency.

3 Statistics of Hawaii Agriculture